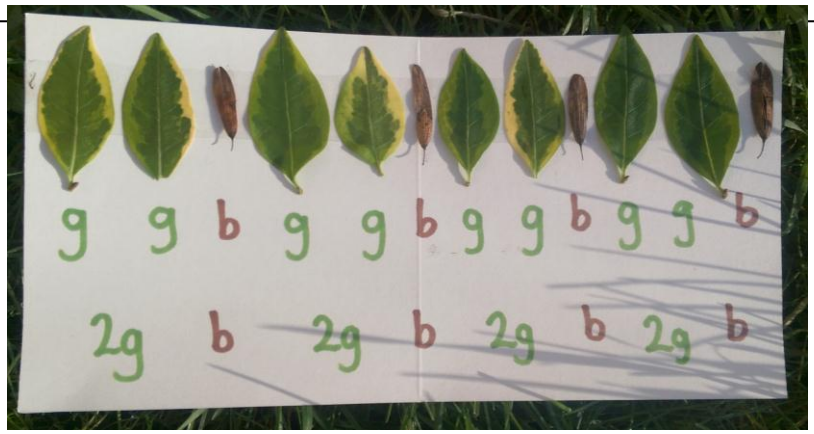
Natural number art

Pattern algebra

Resources: range of natural materials – different sizes and different colours, long pieces of card with double sided sticky tape attached.

Give children a long piece of card with double sided sticky tape on. Peel back the sticky tape and see if children can collect suitable sized materials to make a pattern.

Represent each object with a letter, e.g. g for green leaf or b for brown leaf. Write the letter underneath each object. This can be turned into an algebraic sequence which can be used to predict what will come next, e.g. 2g b 2g b…. These will become more complex when using a wider range of materials.



Flower formulas

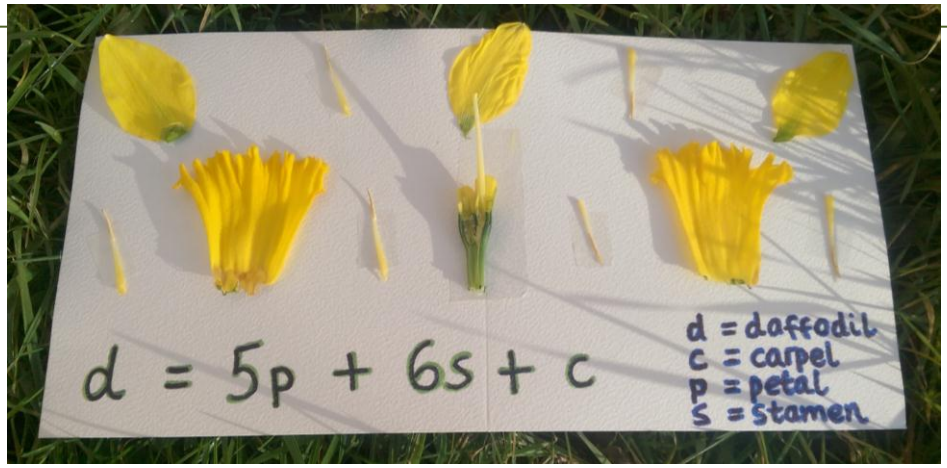
Resources: flowers to dissect, card, double sided sticky tape

This activity would be suitable after children have learnt about parts of a flower.

Dissect a flower, identifying the different parts and arrange them into small piles. Give each part a letter (e.g. petals (p), stamen (s) and carpel (c)) and construct a formula.

e.g. daffodil (d) = 5p + 6s + c

Children could arrange the parts of the flower in a symmetrical pattern on paper (use double sided sticky tape and laminate to keep it for a display).



Number pictures

Resources: wide range of natural materials, whiteboards and pens

Each group are given a challenge to find a set number of natural materials that are equally divided into a set number of categories, e.g. 32 materials divided into 4 categories of pebbles, green leaves, brown leaves and acorns.

Can the children work as a group to make a piece of natural art using these materials?

They could be awarded points for completing certain challenges, e.g.

- Tallest structure
- Symmetrical picture
- Include a set number of different shapes